FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Freeport LNG Development, L.P.

AUTHORIZING THE OPERATION OF
Freeport LNG Pretreatment Facility
Natural Gas Liquids

LOCATED AT
Brazoria County, Texas
Latitude 28° 58' 45" Longitude 95° 18' 25"
Regulated Entity Number: RN106481500

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O3958 Issuance Date: _____

_____
For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

    C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

    D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.

F. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.302 (relating to General Provisions)

(ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)

(iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit

G. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:

(i) Title 30 TAC § 101.352 (relating to General Provisions)

(ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)

(iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)

(iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)

(v) Title 30 TAC § 101.358 (relating to Emission Monitoring and Compliance Demonstration)

(vi) Title 30 TAC § 101.359 (relating to Reporting)

(vii) Title 30 TAC § 101.360 (relating to Level of Activity Certification)

(viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit

H. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.372 (relating to General Provisions)

(ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)

(iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to

vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable,

but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

B. Title 40 CFR § 60.8 (relating to Performance Tests)

C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

D. Title 40 CFR § 60.12 (relating to Circumvention)

E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

F. Title 40 CFR § 60.14 (relating to Modification)

G. Title 40 CFR § 60.15 (relating to Reconstruction)

H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

6. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:

   A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).

   B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

   C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

   D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.

   E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.

7. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

8. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under

30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

A. Are incorporated by reference into this permit as applicable requirements

B. Shall be located with this operating permit

C. Are not eligible for a permit shield

9. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

10. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

11. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

12. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:

A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:

(i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:

(1) Title 30 TAC § 117.9020(2)(A), (C), and (D)

(ii) For electric generating facilities in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020(2)(B)

B. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.

13. Use of Emission Credits to comply with applicable requirements:

A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) Offsets for Title 30 TAC Chapter 116

B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)

(ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1

(iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

14. Use of Discrete Emission Credits to comply with the applicable requirements:

A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

15. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Permit Location

16. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

17. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
60V-89	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5113-WTRSEP	30 TAC Chapter 115, Water Separation	No changing attributes.
67T-90	LOADING/UNLOADING OPERATIONS	N/A	R5211-AMNTK	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
67T-90	STORAGE TANKS/VESSELS	N/A	R5112-AMNTK	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
CS-CLEANER	SOLVENT DEGREASING MACHINES	N/A	R5412-CSCLEANER	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
CT	STATIONARY TURBINES	N/A	R7201-TURB	30 TAC Chapter 117, Subchapter B	No changing attributes.
CT	STATIONARY TURBINES	N/A	60KKKK-TURB	40 CFR Part 60, Subpart KKKK	No changing attributes.
FUG-TREAT	FUGITIVE EMISSION UNITS	N/A	R5312-FUGCS	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Shaft Seal System = Compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal., TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., Complying With § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1)., Compressor Seals = The fugitive unit contains compressor seals., Alternate Control Requirement = The TCEQ Executive Director has not approved an

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for compressor seals or no alternate has been requested., 50% by Volume = Compressors are not in hydrogen service or are in hydrogen service and the hydrogen content cannot be reasonably expected to always excee
FUG-TREAT	FUGITIVE EMISSION UNITS	N/A	R5312-FUGFLGHVP	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Flanges = The fugitive unit contains flanges., Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested., Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1)., TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Flanges do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
FUG-TREAT	FUGITIVE EMISSION UNITS	N/A	R5312-FUGFLGLVP	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Flanges = The fugitive unit contains flanges., Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested., Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1)., TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges do not contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.
FUG-TREAT	FUGITIVE EMISSION UNITS	N/A	R5312-FUGPRVHVP	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	TVP of Process Fluid VOC <= 0.044 psia at 68° F = No pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F., Complying With § 115.352(1) = Pressure relief valves are complying with § 115.352(1)., TVP of Process Fluid VOC > 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP > 0.044 psia at 68° F., Pressure Relief

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					Valves = The fugitive unit contains pressure relief valves., Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for pressure relief valves or no alternate has been requested.
FUG-TREAT	FUGITIVE EMISSION UNITS	N/A	R5312-FUGPRVLVP	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	TVP of Process Fluid VOC <= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F., Complying With § 115.352(1) = Pressure relief valves are complying with § 115.352(1)., TVP of Process Fluid VOC > 0.044 psia at 68° F = No pressure relief valves contact a process fluid with a TVP > 0.044 psia at 68° F., Pressure Relief Valves = The fugitive unit contains pressure relief valves., Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for pressure relief valves or no alternate has been requested.
FUG-TREAT	FUGITIVE EMISSION	N/A	R5312-	30 TAC Chapter 115, Pet.	Shaft Seal System = Pump seals are

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	UNITS		FUGPSHVP	Refinery & Petrochemicals	equipped with a shaft seal system that prevents or detects emission of VOC from the seal., TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Pump seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1)., Pump Seals = The fugitive unit contains pump seals., Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for pump seals or no alternate has been requested.
FUG-TREAT	FUGITIVE EMISSION UNITS	N/A	R5312-FUGPSLVP	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Shaft Seal System = Pump seals are equipped with a shaft seal system that prevents or detects emission of VOC from the seal., TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Pump seals contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1)., Pump Seals

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					= The fugitive unit contains pump seals., Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for pump seals or no alternate has been requested.
FUG-TREAT	FUGITIVE EMISSION UNITS	N/A	R5312-FUGRD	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks., Instrumentation Systems = The fugitive unit does not have instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169., Sampling Connection Systems = The fugitive unit does not have sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169., TVP 0.002 PSIA or Less = The fugitive unit does not have components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.
FUG-TREAT	FUGITIVE EMISSION UNITS	N/A	R5312-FUGVLVHVP	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	TVP of Process Fluid VOC <= 0.044 psia at 68° F = No valves contact a process fluid with a TVP less than or equal to 0.044 psia at 68° F., TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					fluid with a TVP greater than 0.044 psia at 68° F., Complying wIth § 115.352(1) = Valves are complying with § 115.352(1)., Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines., Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for valves or no alternate has been requested.
FUG-TREAT	FUGITIVE EMISSION UNITS	N/A	R5312-FUGVLVLVP	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	TVP of Process Fluid VOC <= 0.044 psia at 68° F = Valves contact a process fluid with a TVP less than or equal to 0.044 psia at 68° F., TVP of Process Fluid VOC > 0.044 psia at 68° F = No valves contact a process fluid with a TVP greater than 0.044 psia at 68° F., Complying wIth § 115.352(1) = Valves are complying with § 115.352(1)., Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines., Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					and documenting continuous compliance with an alternate control requirement or exemption criteria for valves or no alternate has been requested.
FUG-TREAT	FUGITIVE EMISSION UNITS	N/A	60OOOO-FUG	40 CFR Part 60, Subpart OOOO	No changing attributes.
GRP-AU123	GAS SWEETENING/SULFUR RECOVERY UNITS	AU1, AU2, AU3	60OOOO-AU	40 CFR Part 60, Subpart OOOO	No changing attributes.
GRP-DIESLD	LOADING/UNLOADING OPERATIONS	PTFEACT-1, PTFEACT-2, PTFEGT-1, PTFEGT-2, PTFEGT-3, PTFEGT-4, PTFEGT-5, PTFEGT-6, PTFFWPT-1, PTFFWPT-2	R5211-LVPTK	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
GRP-FWP	SRIC ENGINES	PTFFWP, PTFFWP2	R7310-ENGINE	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-FWP	SRIC ENGINES	PTFFWP, PTFFWP2	60IIII-PTFFWP	40 CFR Part 60, Subpart IIII	No changing attributes.
GRP-FWP	SRIC ENGINES	PTFFWP, PTFFWP2	63ZZZZ-PTFFWP	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-HMLD	LOADING/UNLOADING OPERATIONS	PTFHMT, PTFHMT-T4	R5211-LVPTK	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
GRP-HMTK	STORAGE TANKS/VESSELS	PTFHMT, PTFHMT-T4	R5112-HMTK	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-HTR	PROCESS HEATERS/FURNACES	65B-81A, 65B-81B, 65B-81C, 65B-81D, 65B-81E	R7201-HTR	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-HTR	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	65B-81A, 65B-81B, 65B-81C, 65B-81D, 65B-81E	60Db-HTR	40 CFR Part 60, Subpart Db	No changing attributes.
GRP-LEG	SRIC ENGINES	PTFEG-1, PTFEG-2, PTFEG-3, PTFEG-4, PTFEG-5, PTFEG-6	R7310-ENGINE	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-LEG	SRIC ENGINES	PTFEG-1, PTFEG-2, PTFEG-3, PTFEG-4, PTFEG-5, PTFEG-6	60IIII-PTFLEG	40 CFR Part 60, Subpart IIII	No changing attributes.
GRP-LEG	SRIC ENGINES	PTFEG-1, PTFEG-2, PTFEG-3, PTFEG-4, PTFEG-5, PTFEG-6	63ZZZZ-ENGINE	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-LGDTK	STORAGE TANKS/VESSELS	PTFEGT-4, PTFEGT-5	R5112-LDIESELTK	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-LUBVENT	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	LUBVENT	R5113-UCVENT	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-OILLD	LOADING/UNLOADING OPERATIONS	PTFOWT, PTFOWT-T4, PTFSOT, PTFSOT-T4	R5211-OILTK	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
GRP-PTFFLR	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	PTFFLRMSS	R5113-CVENT	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-SEG	SRIC ENGINES	PTFEAC-1, PTFEAC-2	R7310-ENGINE	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-SEG	SRIC ENGINES	PTFEAC-1, PTFEAC-2	60IIII-PTFSEG	40 CFR Part 60, Subpart IIII	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-SEG	SRIC ENGINES	PTFEAC-1, PTFEAC-2	63ZZZZ-ENGINE	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
PTFFLARE	FLARES	N/A	R1111-FLARE	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PTFOWT	STORAGE TANKS/VESSELS	N/A	R5112-OILWTRTK1	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia, Tank Description = Tank using a submerged fill pipe
PTFOWT	STORAGE TANKS/VESSELS	N/A	R5112-OILWTRTK2	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia, Tank Description = Tank does not require emission controls
PTFOWT-T4	STORAGE TANKS/VESSELS	N/A	R5112-OILWTRTK1	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia, Tank Description = Tank using a submerged fill pipe
PTFOWT-T4	STORAGE TANKS/VESSELS	N/A	R5112-OILWTRTK2	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia, Tank Description = Tank does not require emission controls
PTFSOT	STORAGE TANKS/VESSELS	N/A	R5112-OILCNDTK1	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia, Tank Description = Tank using a submerged fill pipe
PTFSOT	STORAGE TANKS/VESSELS	N/A	R5112-OILCNDTK2	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia, Tank Description = Tank does not require emission controls

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
PTFSOT-T4	STORAGE TANKS/VESSELS	N/A	R5112-OILCNDTK1	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia, Tank Description = Tank using a submerged fill pipe
PTFSOT-T4	STORAGE TANKS/VESSELS	N/A	R5112-OILCNDTK2	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia, Tank Description = Tank does not require emission controls

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
60V-89	EU	R5113-WTRSEP	VOC	30 TAC Chapter 115, Water Separation	§ 115.132(a)(3) § 115.131(a)	VOC water separator compartments must be equipped with a vapor recovery system which satisfies the provisions of §115.131(a) of this title.	[G]§ 115.135(a) § 115.136(a)(2) § 115.136(a)(3) § 115.136(a)(4)	§ 115.136(a)(2) § 115.136(a)(3) § 115.136(a)(4)	None
67T-90	EU	R5211-AMNTK	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
67T-90	EU	R5112-AMNTK	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
CS-CLEANER	EU	R5412-CSCLEANER	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) § 115.411(1) § 115.411(2) [G]§ 115.412(1)(A) § 115.412(1)(C) § 115.412(1)(D) [G]§ 115.412(1)(F)	Cold solvent cleaning. No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F).	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
CT	EU	R7201-TURB	NO_x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(10)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.320(a) § 117.320(b)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO_x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3,	§ 117.320(d) [G]§ 117.320(e) § 117.320(h) § 117.320(k) [G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f)	§ 117.320(f) § 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.320(g) § 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 117.320(c) § 117.320(i) § 117.320(j) § 117.320(k) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.335(g) § 117.340(a) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		§ 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
CT	EU	R7201-TURB	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)		§ 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
CT	EU	R7201-TURB	NH_3	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(A)	For stationary gas turbines that inject urea or ammonia into the exhaust stream for NO_x control, ammonia emissions must not exceed 10 ppmv at 15% O_2, dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(d) § 117.8000(b) § 117.8000(c) § 117.8000(c)(3) § 117.8000(c)(4) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8130	§ 117.345(a) § 117.345(f) § 117.345(f)(11) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.8130(2)		
CT	EU	60KKKK-TURB	NO_X	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4325 § 60.4333(a) § 60.4335(b)(1) § 60.4335(b)(2) § 60.4335(b)(3) § 60.4335(b)(4) [G]§ 60.4345	New, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h must meet the nitrogen oxides emission standard of 54 ng/J of useful output (0.43 lb/MWh).	§ 60.4335(b)(1) § 60.4335(b)(2) § 60.4335(b)(3) § 60.4335(b)(4) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(f)(2) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395
CT	EU	60KKKK-TURB	SO_2	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(b) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii)	§ 60.4365(b)	§ 60.4375(a)
FUG-TREAT	EU	R5312-FUGCS	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(5)	
FUG-TREAT	EU	R5312-FUGCS	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-TREAT	EU	R5312-FUGFLGHVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-TREAT	EU	R5312-FUGFLGLVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
FUG-TREAT	EU	R5312-FUGPRVHVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-TREAT	EU	R5312-FUGPRVLVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-TREAT	EU	R5312-FUGPSHVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
FUG-TREAT	EU	R5312-FUGPSHVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-TREAT	EU	R5312-FUGPSLVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUG-TREAT	EU	R5312-FUGPSLVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-TREAT	EU	R5312-FUGPSLVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-TREAT	EU	R5312-FUGRD	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG-TREAT	EU	R5312-FUGVLVHVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
FUG-TREAT	EU	R5312-FUGVLVLVP	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-TREAT	EU	60OOOO-FUG	VOC	40 CFR Part 60, Subpart OOOO	§ 60.5365 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart OOOO	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart OOOO	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart OOOO	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart OOOO	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart OOOO
GRP-AU123	EU	60OOOO-AU	SO_2	40 CFR Part 60, Subpart OOOO	§ 60.5365 The permit holder shall comply with the applicable limitation, standard	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart OOOO	The permit holder shall comply with the applicable monitoring and testing requirements	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart OOOO

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					and/or equipment specification requirements of 40 CFR Part 60, Subpart OOOO		of 40 CFR Part 60, Subpart OOOO	Part 60, Subpart OOOO	
GRP-DIESLD	EU	R5211-LVPTK	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
GRP-FWP	EU	R7310-ENGINE	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
GRP-FWP	EU	60IIII-PTFFWP	NMHC and NO_X	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c)	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.4211(f) § 60.4218	to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with an NMHC+NOx emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart.			
GRP-FWP	EU	60IIII-PTFFWP	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
GRP-FWP	EU	63ZZZZ-PTFFWP	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-HMLD	EU	R5211-LVPTK	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
GRP-HMTK	EU	R5112-HMTK	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
GRP-HTR	EU	R7201-HTR	NO_X	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(i) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO_x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(1) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) §	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
GRP-HTR	EU	R7201-HTR	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(7) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
GRP-HTR	EU	60Db-HTR	SO_2	40 CFR Part 60, Subpart Db	§ 60.42b(k)(2)	Units firing only very low sulfur oil and/or a mixture of gaseous fuels with a potential SO2 emission rate	§ 60.47b(f)	§ 60.45b(k) § 60.49b(o) § 60.49b(r) [G]§ 60.49b(r)(2)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(r) [G]§ 60.49b(r)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO2 emissions limit in §60.42b(k)(1).			
GRP-HTR	EU	60Db-HTR	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRP-HTR	EU	60Db-HTR	PM (Opacity)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRP-HTR	EU	60Db-HTR	NO_X	40 CFR Part 60, Subpart Db	§ 60.44b(l)(2) § 60.44b(h) § 60.44b(i) § 60.46b(a)	Affected facilities with a low heat release rate and combusting natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels, a limit determined by use of the specified formula.	§ 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(4) [G]§ 60.48b(b) § 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) § 60.48b(g)(1)	[G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h) § 60.49b(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
GRP-LEG	EU	R7310-ENGINE	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j),	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)			
GRP-LEG	EU	60IIII-PTFLEG	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
GRP-LEG	EU	60IIII-PTFLEG	NMHC and NO_X	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than 560 KW and less than or equal to 2237 KW and a displacement of less than 10	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 89.112(a)	liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 6.4 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).			
GRP-LEG	EU	60IIII-PTFLEG	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
GRP-LEG	EU	63ZZZZ-ENGINE	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-LGDTK	EU	R5112-LDIESELTK	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRP-LUBVENT	EP	R5113-UCVENT	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-LUBVENT	EP	R5113-UCVENT	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-OILLD	EU	R5211-OILTK	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(2)(A) [G]§ 115.212(a)(7) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Any plant, excluding gasoline bulk plants, which loads less than 20,000 gpd of VOC with a true vapor pressure of 0.5 psia or greater is exempt from the requirements of this division, except for the specified requirements.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B) § 115.216(3)(D)	None
GRP-PTFFLR	EP	R5113-CVENT	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).			
GRP-SEG	EU	R7310-ENGINE	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
GRP-SEG	EU	60IIII-PTFSEG	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-SEG	EU	60IIII-PTFSEG	NMHC and NO_X	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
GRP-SEG	EU	60IIII-PTFSEG	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
GRP-SEG	EU	63ZZZZ-ENGINE	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.			
PTFFLARE	CD	R1111-FLARE	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
PTFOWT	EU	R5112-OILWTRTK1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None
PTFOWT	EU	R5112-OILWTRTK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PTFOWT-T4	EU	R5112-OILWTRTK1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None
PTFOWT-T4	EU	R5112-OILWTRTK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
PTFSOT	EU	R5112-OILCNDTK1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PTFSOT	EU	R5112-OILCNDTK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
PTFSOT-T4	EU	R5112-OILCNDTK1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None
PTFSOT-T4	EU	R5112-OILCNDTK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Additional Monitoring Requirements

CAM Summary

Unit/Group/Process Information	
ID No.: GRP-PTFFLR	
Control Device ID No.: PTFFLARE	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5113-CVENT
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: Absence of a pilot flame when a VOC containing gas stream is being vented to the flare shall be considered and reported as a deviation.	
CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: CS-CLEANER	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-CSCLEANER
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 30 TAC §115.412(1)(A)-(F) shall be considered and reported as a deviation.	
Periodic Monitoring Text: Inspect equipment and record data monthly to ensure compliance with any applicable requirements in § 115.412(1)(A)-(F). Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFOWT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-OILWTRTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered and reported as a deviation if repairs to maintain the structural integrity of the fill pipe are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed to ensure that it continues to meet the specifications in the above requirement. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFOWT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-OILWTRTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Failure to keep a record of tank construction specifications that show fill pipe details when tank is loaded from top or from the side shall be considered and reported as a deviation.	
Periodic Monitoring Text: Keep a record of tank construction specifications (e.g. engineering drawings) that show a fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when the tank is loaded from the side, a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFOWT-T4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-OILWTRTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered and reported as a deviation if repairs to maintain the structural integrity of the fill pipe are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed to ensure that it continues to meet the specifications in the above requirement. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFOWT-T4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-OILWTRTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Failure to keep a record of tank construction specifications that show fill pipe details when tank is loaded from top or from the side shall be considered and reported as a deviation.	
Periodic Monitoring Text: Keep a record of tank construction specifications (e.g. engineering drawings) that show a fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when the tank is loaded from the side, a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFSOT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-OILCNDTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered and reported as a deviation if repairs to maintain the structural integrity of the fill pipe are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed to ensure that it continues to meet the specifications in the above requirement. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFSOT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-OILCNDTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Failure to keep a record of tank construction specifications that show fill pipe details when tank is loaded from top or from the side shall be considered and reported as a deviation.	
Periodic Monitoring Text: Keep a record of tank construction specifications (e.g. engineering drawings) that show a fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when the tank is loaded from the side, a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFSOT-T4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-OILCNDTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered and reported as a deviation if repairs to maintain the structural integrity of the fill pipe are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed to ensure that it continues to meet the specifications in the above requirement. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFSOT-T4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-OILCNDTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Failure to keep a record of tank construction specifications that show fill pipe details when tank is loaded from top or from the side shall be considered and reported as a deviation.	
Periodic Monitoring Text: Keep a record of tank construction specifications (e.g. engineering drawings) that show a fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when the tank is loaded from the side, a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	

Permit Shield

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
60V-89	N/A	40 CFR Part 63, Subpart VV	The emissions from the water separators are not subject to another subpart of 40 CFR Parts 60, 61, or 63 that references the use of 40 CFR Part 63, Subpart VV.
67T-90	N/A	40 CFR Part 60, Subpart Kb	The storage tank has a capacity greater than 151 cubic meters (39,890 gallons) but the maximum true vapor pressure of the stored liquids is less than 3.5 kPa (0.51 psia).
FUG-TREAT	N/A	30 TAC Chapter 115, HRVOC Fugitive Emissions	The processes at the site do not include HRVOCs, as defined by §115.10(21)(B), as raw materials, intermediates, final products, nor are they included in any waste streams.
FUG-TREAT	N/A	40 CFR Part 60, Subpart KKK	The construction of the fugitive components commenced after August 23, 2011.
GRP-AU123	AU1, AU2, AU3	30 TAC Chapter 112, Sulfur Compounds	The amine unit is not an affected unit since it does not utilize sulfur recovery.
GRP-AU123	AU1, AU2, AU3	40 CFR Part 60, Subpart LLL	The construction of the amine unit commenced after August 23, 2011.
GRP-HMTK	PTFHMT, PTFHMT-T4	40 CFR Part 60, Subpart Kb	The storage tanks have capacities greater than 151 cubic meters (39,890 gallons) but the maximum true vapor pressure of the stored liquids is less than 3.5 kPa (0.51 psia).
GRP-LGDTK	PTFEGT-4, PTFEGT-5	40 CFR Part 60, Subpart Kb	The storage tanks have capacities of less than 75 cubic meters (19,813 gallons).
GRP-SMDTK	PTFEACT-1, PTFEACT-2, PTFEGT-1, PTFEGT-2,	30 TAC Chapter 115, Storage of VOCs	The storage tanks have capacities of less than 1,000 gallons.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
	PTFEGT-3, PTFEGT-6, PTFFWPT-1, PTFFWPT-2		
GRP-SMDTK	PTFEACT-1, PTFEACT-2, PTFEGT-1, PTFEGT-2, PTFEGT-3, PTFEGT-6, PTFFWPT-1, PTFFWPT-2	40 CFR Part 60, Subpart Kb	The storage tanks have capacities of less than 75 cubic meters (19,813 gallons).
GRP-STRMCEP	65U-60, 65U-61, 65U-62, 65U-63, 65U-64, 65U-65, 65U-66, 65U-67, 65U-68, 65U-69	30 TAC Chapter 115, Water Separation	The water separators are designed solely to capture stormwater, spills, or exterior surface cleanup waters and are fully covered.
GRP-STRMCEP	65U-60, 65U-61, 65U-62, 65U-63, 65U-64, 65U-65, 65U-66, 65U-67, 65U-68, 65U-69	40 CFR Part 63, Subpart VV	The emissions from the water separators are not subject to another subpart of 40 CFR Parts 60, 61, or 63 that references the use of 40 CFR Part 63, Subpart VV.
PTFFLARE	N/A	40 CFR Part 60, Subpart A	The flare is not a control device used to comply with applicable subparts of 40 CFR Parts 60 and 61.
PTFFLARE	N/A	40 CFR Part 63, Subpart A	The flare is not a control device used to comply with applicable subparts of 40 CFR Part 63.
PTFOWT	N/A	40 CFR Part 60, Subpart Kb	The storage tank has a capacity less than 75 cubic meters (19,813 gallons).
PTFOWT	N/A	40 CFR Part 60, Subpart OOOO	The storage tank does not use controls for VOC emissions and the tank has a potential to emit (PTE) less than 6 tpy of VOC emissions.
PTFOWT-T4	N/A	40 CFR Part 60, Subpart Kb	The storage tank has a capacity less than 75 cubic meters (19,813 gallons).
PTFOWT-T4	N/A	40 CFR Part 60, Subpart OOOOa	The storage tank does not use controls for

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			VOC emissions and the tank has a potential to emit (PTE) less than 6 tpy of VOC emissions.
PTFSOT	N/A	40 CFR Part 60, Subpart Kb	The storage tank has a capacity less than 75 cubic meters (19,813 gallons).
PTFSOT	N/A	40 CFR Part 60, Subpart OOOO	The storage tank does not use controls for VOC emissions and the tank has a potential to emit (PTE) less than 6 tpy of VOC emissions.
PTFSOT-T4	N/A	40 CFR Part 60, Subpart Kb	The storage tank has a capacity less than 75 cubic meters (19,813 gallons).
PTFSOT-T4	N/A	40 CFR Part 60, Subpart OOOOa	The storage tank does not use controls for VOC emissions and the tank has a potential to emit (PTE) less than 6 tpy of VOC emissions.

New Source Review Authorization References

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Nonattainment (NA) Permits	
NA Permit No.: N170	Issuance Date: 05/21/2015
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 104840	Issuance Date: 05/21/2015
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.352	Version No./Date: 11/22/2012
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
60V-89	CLOSED DRAIN DRUM	104840, N170
65B-81A	HEAT MEDIUM HEATER A	104840, N170
65B-81B	HEAT MEDIUM HEATER B	104840, N170
65B-81C	HEAT MEDIUM HEATER C	104840, N170
65B-81D	HEAT MEDIUM HEATER D	104840, N170
65B-81E	HEAT MEDIUM HEATER E	104840, N170
65U-60	OILY WATER STORMCEPTOR - UNIT 60	106.532/09/04/2000
65U-61	OILY WATER STORMCEPTOR - UNIT 61	106.532/09/04/2000
65U-62	OILY WATER STORMCEPTOR - UNIT 62	106.532/09/04/2000
65U-63	OILY WATER STORMCEPTOR - UNIT 63	106.532/09/04/2000
65U-64	OILY WATER STORMCEPTOR - UNIT 64	106.532/09/04/2000
65U-65	OILY WATER STORMCEPTOR - UNIT 65	106.532/09/04/2000
65U-66	OILY WATER STORMCEPTOR - UNIT 66	106.532/09/04/2000
65U-67	OILY WATER STORMCEPTOR - UNIT 67	106.532/09/04/2000
65U-68	OILY WATER STORMCEPTOR - UNIT 68	106.532/09/04/2000
65U-69	OILY WATER STORMCEPTOR - UNIT 69	106.532/09/04/2000
67T-90	AMINE TANK	106.472/09/04/2000
67T-90	AMINE TANK UNLOADING	106.472/09/04/2000
AU1	AMINE UNIT 1	104840, N170
AU2	AMINE UNIT 2	104840, N170
AU3	AMINE UNIT 3	104840, N170

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
CS-CLEANER	COLD SOLVENT CLEANER	106.454/11/01/2001
CT	COMBUSTION TURBINE	104840, N170
FUG-TREAT	FUGITIVE EMISSIONS - TRAINS 1, 2, 3	104840, N170
LUBVENT	LUBE OIL VENT	104840, N170
PTFEAC-1	EMERGENCY AIR COMPRESSOR	106.511/09/04/2000
PTFEAC-2	EMERGENCY AIR COMPRESSOR	106.511/09/04/2000
PTFEACT-1	EMERGENCY AIR COMPRESSOR DIESEL TANK	106.472/09/04/2000
PTFEACT-1	EMERGENCY AIR COMPRESSOR TANK UNLOADING	106.472/09/04/2000
PTFEACT-2	EMERGENCY AIR COMPRESSOR DIESEL TANK	106.472/09/04/2000
PTFEACT-2	EMERGENCY AIR COMPRESSOR TANK UNLOADING	106.472/09/04/2000
PTFEG-1	EMERGENCY GENERATOR (DFEJ)	106.511/09/04/2000
PTFEG-2	EMERGENCY GENERATOR (DFEJ)	106.511/09/04/2000
PTFEG-3	EMERGENCY GENERATOR (DFEJ)	106.511/09/04/2000
PTFEG-4	EMERGENCY GENERATOR (DQFAH)	106.511/09/04/2000
PTFEG-5	EMERGENCY GENERATOR (DQFAH)	106.511/09/04/2000
PTFEG-6	EMERGENCY GENERATOR (DFEJ)	106.511/09/04/2000
PTFEGT-1	EMERGENCY GENERATOR (DFEJ) TANK UNLOADING	106.472/09/04/2000
PTFEGT-1	EMERGENCY GENERATOR (DFEJ) DIESEL TANK	106.472/09/04/2000
PTFEGT-2	EMERGENCY GENERATOR (DFEJ) DIESEL TANK	106.472/09/04/2000
PTFEGT-2	EMERGENCY GENERATOR (DFEJ) TANK UNLOADING	106.472/09/04/2000
PTFEGT-3	EMERGENCY GENERATOR (DFEJ) DIESEL TANK	106.472/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
PTFEGT-3	EMERGENCY GENERATOR (DFEJ) TANK UNLOADING	106.472/09/04/2000
PTFEGT-4	EMERGENCY GENERATOR (DQFAH) DIESEL TANK	106.472/09/04/2000
PTFEGT-4	EMERGENCY GENERATOR (DQFAH) TANK UNLOADING	106.472/09/04/2000
PTFEGT-5	EMERGENCY GENERATOR (DQFAH) DIESEL TANK	106.472/09/04/2000
PTFEGT-5	EMERGENCY GENERATOR (DQFAH) TANK UNLOADING	106.472/09/04/2000
PTFEGT-6	EMERGENCY GENERATOR (DFEJ) DIESEL TANK	106.472/09/04/2000
PTFEGT-6	EMERGENCY GENERATOR (DFEJ) TANK UNLOADING	106.472/09/04/2000
PTFFLARE	PTF FLARE	104840, N170
PTFFLRMSS	MSS VENT TO FLARE	104840, N170
PTFFWP2	FIRE WATER PUMP (TRAIN 4)	106.511/09/04/2000
PTFFWP	FIRE WATER PUMP	106.511/09/04/2000
PTFFWPT-1	FIRE WATER PUMP TANK 1	106.472/09/04/2000
PTFFWPT-1	FIRE WATER PUMP TANK UNLOADING	106.472/09/04/2000
PTFFWPT-2	FIRE WATER PUMP TANK 2	106.472/09/04/2000
PTFFWPT-2	FIRE WATER PUMP TANK 2 UNLOADING	106.472/09/04/2000
PTFHMT	HEAT MEDIUM TANK - TRAINS 1, 2, 3	106.472/09/04/2000
PTFHMT	HEAT MEDIUM TANK UNLOADING - TRAINS 1, 2, 3	106.472/09/04/2000
PTFHMT-T4	HEAT MEDIUM TANK - TRAIN 4	106.472/09/04/2000
PTFHMT-T4	HEAT MEDIUM TANK LOADING - TRAIN 4	106.472/09/04/2000
PTFOWT	OILY WATER TANK - TRAINS 1, 2, 3	106.352/11/22/2012
PTFOWT	OILY WATER TANK LOADING - TRAINS 1, 2, 3	106.352/11/22/2012

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
PTFOWT-T4	OILY WATER TANK - TRAIN 4	106.352/11/22/2012
PTFOWT-T4	OILY WATER TANK LOADING - TRAIN 4	106.352/11/22/2012
PTFSOT	SLOP OIL TANK - TRAINS 1, 2, 3	106.352/11/22/2012
PTFSOT	SLOP OIL TANK LOADING - TRAINS 1, 2, 3	106.352/11/22/2012
PTFSOT-T4	SLOP OIL TANK - TRAIN 4	106.352/11/22/2012
PTFSOT-T4	SLOP OIL TANK LOADING - TRAIN 4	106.352/11/22/2012

Appendix A

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
CEMS ..... continuous emissions monitoring system
CFR ..... Code of Federal Regulations
COMS ..... continuous opacity monitoring system
CVS ..... closed vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MACT ..... Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr ..... Million British thermal units per hour
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NESHAP ..... National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PEMS ..... predictive emissions monitoring system
PM ..... particulate matter
ppmv ..... parts per million by volume
PRO ..... process unit
PSD ..... prevention of significant deterioration
psia ..... pounds per square inch absolute
SIP ..... state implementation plan
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

Appendix B

Texas Commission on Environmental Quality

Major NSR Summary Table

Permit Number: 104840/N170			Issuance Date: 05/21/2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
65B-81A	Heating Medium Heater A	NO_x	0.83	--	9, 11, 16, 17, 21, 22	9, 11, 17, 21, 22, 34	17
		CO	2.52	--			
		PM_{10}	0.91	--			
		$PM_{2.5}$	0.91	--			
		SO_2	0.08	--			
		H_2SO_4	<0.01	--			
		VOC	0.26	--			
65B-81B	Heating Medium Heater B	NO_x	0.83	--	9, 11, 16, 17, 21, 22	9, 11, 17, 21, 22, 34	17
		CO	2.52	--			
		PM_{10}	0.91	--			
		$PM_{2.5}$	0.91	--			
		SO_2	0.08	--			
		H_2SO_4	<0.01	--			
		VOC	0.26	--			
65B-81C	Heating Medium Heater C	NO_x	0.83	--	9, 11, 16, 17, 21, 22	9, 11, 17, 21, 22, 34	17
		CO	2.52	--			
		PM_{10}	0.91	--			
		$PM_{2.5}$	0.91	--			
		SO_2	0.08	--			
		H_2SO_4	<0.01	--			

Permit Number: 104840/N170			Issuance Date: 05/21/2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		VOC	0.26	--			
65B-81D	Heating Medium Heater D	NO_x	0.83	--	9, 11, 16, 17, 21, 22	9, 11, 17, 21, 22, 34	17
		CO	2.52	--			
		PM_{10}	0.91	--			
		$PM_{2.5}$	0.91	--			
		SO_2	0.08	--			
		H_2SO_4	<0.01	--			
		VOC	0.26	--			
65B-81E	Heating Medium Heater E	NO_x	0.83	--	9, 11, 16, 17, 21, 22	9, 11, 17, 21, 22, 34	17
		CO	2.52	--			
		PM_{10}	0.91	--			
		$PM_{2.5}$	0.91	--			
		SO_2	0.08	--			
		H_2SO_4	<0.01	--			
		VOC	0.26	--			
65B-81A 65B-81B 65B-81C 65B-81D 65B-81E	Heating Medium Heaters A through E Annual Emissions Cap	NO_x	--	4.36	9, 11, 16, 17, 21, 22	9, 11, 17, 21, 22, 34	17
		CO	--	13.27			
		PM_{10}	--	4.79			
		$PM_{2.5}$	--	4.79			
		SO_2	--	0.41			
		H_2SO_4	--	0.03			
		VOC	--	1.37			

Permit Number: 104840/N170			Issuance Date: 05/21/2015				
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates (4)**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (5)**	**Spec. Cond.**	**Spec. Cond.**	**Spec. Cond.**
TO1	Amine Unit / Thermal Oxidizer 61	NO_x	0.30	1.31	10, 11, 17, 23, 24, 25, 26, 27, 28	10, 11, 17, 23, 24, 25, 26, 27, 28, 34	17, 23
		CO	0.09	0.40			
		PM_{10}	1.29	5.65			
		$PM_{2.5}$	1.29	5.65			
		SO_2	0.85	3.04			
		H_2SO_4	0.06	0.23			
		VOC	0.02	0.09			
		H_2S	0.17	0.62			
TO2	Amine Unit / Thermal Oxidizer 62	NO_x	0.30	1.31	10, 11, 17, 23, 24, 25, 26, 27, 28	10, 11, 17, 23, 24, 25, 26, 27, 28, 34	17, 23
		CO	0.09	0.40			
		PM_{10}	1.29	5.65			
		$PM_{2.5}$	1.29	5.65			
		SO_2	0.85	3.04			
		H_2SO_4	0.06	0.23			
		VOC	0.02	0.09			
		H_2S	0.17	0.62			
TO3	Amine Unit / Thermal Oxidizer 63	NO_x	0.30	1.31	10, 11, 17, 23, 24, 25, 26, 27, 28	10, 11, 17, 23, 24, 25, 26, 27, 28, 34	17, 23
		CO	0.09	0.40			
		PM_{10}	1.29	5.65			
		$PM_{2.5}$	1.29	5.65			
		SO_2	0.85	3.04			
		H_2SO_4	0.06	0.23			
		VOC	0.02	0.09			
		H_2S	0.17	0.62			

Permit Number: 104840/N170			Issuance Date: 05/21/2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
CT	Combustion Turbine Stack	NO_x (7)	9.87	40.29	2, 8, 11, 16, 17, 18, 19, 20, 29	2, 8, 11, 17, 18, 19, 20, 29, 34	2, 17, 18, 19
		NO_x (SS) (7)	87.00	-			
		CO (7)	12.02	48.95			
		CO (SS) (7)	57.00	-			
		PM_{10}	15.22	65.06			
		$PM_{2.5}$	15.22	65.06			
		SO_2	3.68	15.12			
		H_2SO_4	0.28	1.16			
		VOC	3.43	13.95			
		NH_3	18.24	74.11			
LUBVENT	Lube Oil Vent	PM_{10}	0.05	0.22	GC5, GC7	GC7	
		$PM_{2.5}$	0.05	0.22			
		VOC	0.05	0.22			
PTFFLARE	PTF Flare	NO_x	21.65	2.06	7, 10, 30	7, 10, 30, 34	7
		CO	43.22	4.11			
		VOC	127.21	1.15			
PTFFWP	Fire Water Pump	NO_x	4.12	0.21	2, 3, 4, 5, 6	2, 3, 4, 5, 6, 34	2, 3, 4, 5
		CO	3.80	0.19			
		PM_{10}	0.22	0.01			
		$PM_{2.5}$	0.22	0.01			
		SO_2	0.01	<0.01			
		H_2SO_4	<0.01	<0.01			
		VOC	0.22	0.01			
PTFEG-1	Emergency Generator Train 61	NO_x	7.55	0.19	2, 3, 4, 5, 6	2, 3, 4, 5, 6, 34	2, 3, 4, 5
		CO	4.34	0.11			

Permit Number: 104840/N170			Issuance Date: 05/21/2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM_{10}	0.25	0.01			
		$PM_{2.5}$	0.25	0.01			
		SO_2	0.01	<0.01			
		H_2SO_4	<0.01	<0.01			
		VOC	0.40	0.0099			
PTFEG-2	Emergency Generator Train 62	NO_x	7.55	0.19	2, 3, 4, 5, 6	2, 3, 4, 5, 6, 34	2, 3, 4, 5
		CO	4.34	0.11			
		PM_{10}	0.25	0.01			
		$PM_{2.5}$	0.25	0.01			
		SO_2	0.01	<0.01			
		H_2SO_4	<0.01	<0.01			
		VOC	0.40	0.0099			
PTFEG-3	Emergency Generator Train 63	NO_x	7.55	0.19	2, 3, 4, 5, 6	2, 3, 4, 5, 6, 34	2, 3, 4, 5
		CO	4.34	0.11			
		PM_{10}	0.25	0.01			
		$PM_{2.5}$	0.25	0.01			
		SO_2	0.01	<0.01			
		H_2SO_4	<0.01	<0.01			
		VOC	0.40	0.0099			
PTFEG-4	Emergency Generator Utility Area	NO_x	7.55	0.19	2, 3, 4, 5, 6	2, 3, 4, 5, 6, 34	2, 3, 4, 5
		CO	4.34	0.11			
		PM_{10}	0.25	0.01			
		$PM_{2.5}$	0.25	0.01			

Permit Number: 104840/N170			Issuance Date: 05/21/2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		SO_2	0.01	<0.01			
		H_2SO_4	<0.01	<0.01			
		VOC	0.40	0.0099			
PTFEG-5	Emergency Generator Utility Area	NO_x	7.55	0.19	2, 3, 4, 5, 6	2, 3, 4, 5, 6, 34	2, 3, 4, 5
		CO	4.34	0.11			
		PM_{10}	0.25	0.01			
		$PM_{2.5}$	0.25	0.01			
		SO_2	0.01	<0.01			
		H_2SO_4	<0.01	<0.01			
		VOC	0.40	0.0099			
PTFEAC-1	Emergency Air Compressor	NO_x	1.87	0.05	2, 3, 4, 5, 6	2, 3, 4, 5, 6, 34	2, 3, 4, 5
		CO	1.73	0.04			
		PM_{10}	0.10	<0.01			
		$PM_{2.5}$	0.10	<0.01			
		SO_2	0.01	<0.01			
		H_2SO_4	<0.01	<0.01			
		VOC	0.10	0.0025			
FUG-TREAT (6)	Pretreatment VOC Fugitives	VOC	0.22	0.98	14, 15	14, 15	14
FUG-CT (6)	Pretreatment Ammonia Fugitives	NH_3	0.12	0.51	13	13, 34	
PTFFWPT-1	Diesel Firewater Tank	VOC	0.02	0.00042	31, GC5, GC7	GC7	
PTFEGT-1	Diesel Emergency Generator Tank 1	VOC	<0.01	0.00058	31, GC5, GC7	GC7	
PTFEGT-2	Diesel Emergency Generator Tank 2	VOC	<0.01	0.00058	31, GC5, GC7	GC7	

Permit Number: 104840/N170			Issuance Date: 05/21/2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
PTFEGT-3	Diesel Emergency Generator Tank 3	VOC	<0.01	0.00058	31, GC5, GC7	GC7	
PTFEGT-4	Diesel Emergency Generator Tank 4	VOC	<0.01	0.00058	31, GC5, GC7	GC7	
PTFEGT-5	Diesel Emergency Generator Tank 5	VOC	<0.01	0.00058	31, GC5, GC7	GC7	
PTFEACT-1	Diesel Emergency Air Compressor Tank 1	VOC	<0.01	0.00058	31, GC5, GC7	GC7	

Footnotes:

(1) Emission point identification - either specific equipment designation or EPN from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
H_2SO_4 - sulfuric acid mist
H_2S - hydrogen sulfide
(4) Planned startup and shutdown (SS) lbs/hour emissions for all pollutants are authorized even if not specifically identified as SS.
(5) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period. Annual emission rates for each source include planned SS emissions.
(6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(7) Combustion turbine annual emission rate is for normal and MSS emissions combined.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AIR QUALITY PERMIT

A Permit Is Hereby Issued To
Freeport LNG Development, L.P.
Authorizing the Construction and Operation of
Natural Gas Pretreatment Facility
Located at **Freeport, Brazoria County, Texas**
Latitude 28° 58′ 45″ Longitude −95° 18′ 25″

Permits: 104840 and N170

Revision Date : May 21, 2015

Expiration Date: July 16, 2024

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC 116.120(a), (b) and (c)]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)]
10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in Texas Health and Safety Code (THSC) 382.003(3) or violate THSC 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.

Special Conditions

Permit Numbers 104840 and N170

1. This permit authorizes emissions only from those emission points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," (MAERT) and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit. Also, this permit authorizes the emissions from planned maintenance, startup, and shutdown.

   If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

Federal Applicability

2. These facilities shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources, Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):

   A. Subpart A: General Provisions.

   B. Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

   C. Subpart KKKK: Standards of Performance for Stationary Combustion Turbines.

3. These facilities shall comply with applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR Part 63:

   A. Subpart A: General Provisions.

   B. Subpart ZZZZ: National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Emissions Standards and Operating Specifications

4. Emergency engines installed under this permit shall be of a type subject to the emission limits and work practices of 40 CFR Part 60 Subpart IIII.

5. The emergency engines authorized in this permit Emission Point Numbers (EPNs): PTFFWP, PTF-EAC1 and PTF-EG1 through PTF-EG5 may only be fired with diesel fuel containing no more than 15 parts per million sulfur by weight.

   Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel or shall allow air pollution control agency representatives to obtain a sample for analysis.

6. Emergency engine with EPN: PTFFWP is limited to no more than 100 hours per year of non-emergency operation. Emergency engines with EPNs: PTF-EG1 through PTF-EG5 and PTF-EAC1 are limited to no more than 50 hours per year of non-emergency operation. Each engine must be equipped with a non-resettable runtime meter.

7. The EPN: PTFFLARE shall be designed and operated in accordance with the following requirements:

   A. Flares will be pressure-assisted. Prior to start of operation of the flares, the permit holder shall submit design information specific to the as-constructed flare showing that operating characteristics of the flare, such as flame stability, will ensure destruction and removal efficiencies (DRE) greater than or equal to the DRE in the permit application.

   B. Fuel for the flare pilots is limited to boil-off gas, pipeline quality natural gas, or a blend of these fuels.

   C. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple, flame-ionization rod, acoustical monitor, infrared monitor, or other equivalent technology. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to within manufacturer's specifications, and shall be calibrated at a frequency in accordance with the manufacturer's specifications.

   D. The flare shall be operated with no visible emissions except during periods not to exceed a total of five minutes during any two consecutive hours.

   E. The permit holder shall install a continuous, pressure and temperature compensated, flow monitor that provides a record of the vent stream flow to the flare in units of standard cubic feet. The flow monitor shall be installed in the vent stream such that the total vent stream to the flare is measured. Flow measurements shall be taken continuously and values shall be recorded on an average one hour basis.

      The flow monitor shall be calibrated according to manufacturer's instructions, or shall have a calibration check by using a second calibrated flow measurement device, annually to meet the following accuracy specifications: the flow monitor shall be +/- 5.0%, temperature sensor shall be +/- 2.0% at absolute temperature, and pressure sensor shall be +/- 5.0 mmHg.

      The flow monitor shall operate at least 95% of the time when the flare is operational, averaged over a rolling twelve (12) month period.

   F. Planned maintenance, startup, and shutdown vent gas releases to the flare shall be limited to no more than 3.0 MMscf/yr based on a rolling 12-month total.

   G. The requirements of this condition are not applicable during emission events. Emission events are not authorized by this permit.

8. Emissions Standards and Operating Specifications for Combustion Turbine (EPN: CT).

   A. Fuel is limited to boil-off gas, pipeline quality natural gas, or a blend of these fuels.

   B. The concentration of nitrogen oxides (NO_x) in the exhaust gas shall not exceed 2.0 parts per million by volume dry (ppmvd) corrected to 15 percent oxygen (O_2), on a rolling 3-hour average, subject to the following specifications:

      (1) Hours of startup and shutdown are excluded.

      (2) Excess emissions caused by emission events are excluded.

      (3) Excess emissions during initial or other major dry low NO_x burner tuning sessions are excluded. Major tuning sessions are scheduled events, and would occur after the completion of initial construction, a combustor change-out, a major repair, maintenance to a combustor, or other similar circumstances.

   C. The concentration of carbon monoxide (CO) from EPN: CT shall not exceed 4.0 ppmvd corrected to 15 percent O_2, on a rolling 3-hour average, excluding startup and shutdown.

   D. The concentration of ammonia (NH_3) from EPN: CT shall not exceed 10 ppmvd corrected to 15 percent O_2, on a rolling 24-hour average.

   E. Planned startup or shutdown is limited to two hours per event.

9. Emissions Standards and Operating Specifications for Heating Medium Heaters (EPNs: 65B-81A through 65B-81E).

   A. Each heater is limited to firing no more than 130 million British thermal units per hour (130 MMBtu/hr) based on the higher heating value (HHV) of the fuel. All five heaters totaled (EPNs: 65B-81A through 65B-81E) are limited to firing 1,368,276 MMBtu per rolling 12-month period.

   B. Fuel is limited to boil-off gas, pipeline quality natural gas, or a blend of these fuels.

   C. The concentration of NO_x from the exhaust gas of each stack shall not exceed 5.0 ppmvd corrected to 3 percent O_2, on a one hour average. This is to be demonstrated during initial compliance testing.

   D. The concentration of CO from the exhaust gas of each stack shall not exceed 25 ppmvd corrected to 3 percent O_2, on a one hour average. This is to be demonstrated during initial compliance testing.

10. Fuel for the thermal oxidizers (EPNs: TO1, TO2, and TO3) and the flare (EPN: PTFFLARE) is limited to boil-off gas, pipeline quality natural gas, or a blend of these fuels.

11. Opacity of emissions from the turbine, heating medium heaters, and thermal oxidizers shall not exceed five percent averaged over a six-minute period from each stack. This determination shall be made by first observing for visible emissions while each facility is in normal operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission point(s). Up to three emissions points may be read concurrently,

provided that all three emissions points are within a 70 degree viewing sector or angle in front of the observer such that the proper sun position (at the observer's back) can be maintained for all three emission points. If visible emissions are observed from an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using 40 CFR Part 60, Appendix A, Test Method 9. Observations shall be performed and recorded quarterly. If the opacity exceeds five percent, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation.

Ammonia Handling

12. The permit holder shall maintain prevention and protection measures for the NH_3 storage system. The NH_3 storage tank area will be marked and protected so as to protect the NH_3 storage area from accidents that could cause a rupture. The aqueous ammonia stored shall have a concentration of less than 20% NH_3 by weight.

13. In addition to the requirements of Special Condition No. 12, the permit holder shall maintain the piping and valves in NH_3 service as follows:

    A. All operating practices and procedures relating to the handling and storage of NH_3 shall conform to the safety recommendations specified for that compound by guidelines of the American National Standards Institute and the Compressed Gas Association.

    B. Audio, visual, and olfactory (AVO) checks for NH_3 leaks shall be made once per day.

    C. Immediately, but no later than 24 hours upon detection of a leak, following the detection of a leak, plant personnel shall take one or more of the following actions:

        (1) Locate and isolate the leak, if necessary.

        (2) Commence repair or replacement of the leaking component.

        (3) Use a leak collection or containment system to control the leak until repair or replacement can be made if immediate repair is not possible.

Piping, Valves, Connectors, Pumps, and Compressors – 28MID

14. Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment:

    A. These conditions shall not apply to equipment where the operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made available upon request.

    The exempted components may be identified by one or more of the following methods:

(1) piping and instrumentation diagram (PID); or

(2) a written or electronic database.

B. Construction of new and reworked piping, valves, pump systems, agitators, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.

C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.

D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Non-accessible valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made available upon request. The non-accessible valves may be identified by one or more of the methods described in subparagraph A above.

E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 8 hours of the components being returned to service. Adjustments shall be made such that a minimum concentration of leaking natural gas or VOC is obtained. Connectors shall be monitored according to Special Condition No. 15.

Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed. If the removal of a component for repair or replacement results in an open-ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 24 hours. If the repair or replacement is not completed within 24 hours, the line or valve must have a cap, blind flange, plug, or second valve installed.

F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

An approved gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane.

For components in natural gas (greater than 70% methane by volume) service, the analyzer may only be calibrated with methane. For components in VOC service, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being

monitored, the response factor shall be calculated for the average composition of the process fluid. If a response factor less than 10 cannot be achieved using methane, than the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking natural gas or VOC is obtained for each component being maintained. Replaced components shall be re-monitored within 15 days of being placed back into natural gas or VOC service.

G. All new and replacement pumps, compressors, and agitators shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

All other pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly.

H. Damaged or leaking valves, connectors, compressor seals, pump seals, and agitator seals found to be emitting natural gas or VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC § 115.782 (c)(1)(B)(i)(II). When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown, the TCEQ Executive Director or designated representative shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown.

I. In lieu of the monitoring frequency specified in paragraph F, valves in gas and light liquid service may be monitored on a semiannual basis if the percent of valves leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Valves in gas and light liquid service may be monitored on an annual basis if the percent of valves leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of valves leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

J. The percent of valves leaking used in paragraph I shall be determined using the following formula:

$$(Vl + Vs) \times 100/Vt = Vp$$

Where:

Vl = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

Vs = the number of valves for which repair has been delayed and are listed on the facility shutdown log.

Vt = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe-to-monitor valves.

Vp = the percentage of leaking valves for the monitoring period.

K. The results of the required fugitive instrument monitoring and maintenance program shall be made available to the TCEQ Executive Director or designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of physical inspections shall be noted in the operator's log or equivalent.

L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard, or an applicable National Emission Standard for Hazardous Air Pollutants and does not constitute approval of alternative standards for these regulations.

15. All accessible connectors in gas\vapor and light liquid service shall be monitored quarterly with an approved gas analyzer in accordance with Items E thru H of Special Condition No. 14.

A. Connectors may be monitored on a semiannual basis if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Connectors may be monitored on an annual basis if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of connectors leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the

facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

B. The percent of connectors leaking used in paragraph A shall be determined using the following formula:

$$(Cl + Cs) \times 100/Ct = Cp$$

Where:

Cl = the number of connectors found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

Cs = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.

Ct = the total number of connectors in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe-to-monitor connectors.

Cp = the percentage of leaking connectors for the monitoring period.

Initial Determination of Compliance

16. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.

17. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs: CT, 65B-81A, 65B-81B, 65B-81C, 65B-81D, 65B-81E, TO1, TO2, and TO3 to determine initial compliance with all emission limits established in this permit. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Methods to be determined during the pretest meeting.

Fuel sampling using the methods and procedures of 40 CFR § 60.4415 may be conducted in lieu of stack sampling for sulfur dioxide (SO_2) or the permit holder may be exempted from fuel monitoring of SO_2 as provided under 40 CFR § 60.4365(a). If fuel sampling is used, compliance with New Source Performance Standards (NSPS) Subpart KKKK, SO_2 limits shall be based on 100 percent conversion of the sulfur in the fuel to SO_2. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

A. The TCEQ Houston Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

(1) Date for pretest meeting.

(2) Date sampling will occur.

(3) Name of firm conducting sampling.

(4) Type of sampling equipment to be used.

(5) Method or procedure to be used in sampling.

(6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions, or the TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate or equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the EPA and copied to TCEQ Regional Director.

B. Air contaminants and diluents to be sampled and analyzed include (but are not limited to)

(1) For EPN: CT NO_x, O_2, CO, volatile organic compounds (VOC), SO_2, and NH_3. Fuel sampling using the methods and procedures of 40 CFR § 60.4415 or 40 CFR § 60.4365(a) may be conducted for monitoring SO_2.

(2) For EPNs: 65B-81A through 65B-81E: NO_x, CO, VOC, and O_2.

(3) For EPNs: TO1, TO2, and TO3: CO, VOC, SO_2, total PM, and O_2.

C. For each EPN: TO1, TO2, and TO3, a VOC destruction efficiency of at least 99% or a VOC outlet concentration of 10 ppmvd or less corrected to 3 percent oxygen on a one hour average must be demonstrated. The minimum operating temperature shall be the average temperature at which compliance with the above was demonstrated.

D. For each regenerative thermal oxidizer (EPNs: TO1, TO2, and TO3) liquid scrubber system, a SO_2 removal efficiency of 97.2% across the liquid scrubber or a SO_2 outlet concentration at the liquid scrubber outlet of 4.5 ppmvd or less corrected to 3 percent oxygen on a one hour average must be demonstrated.

The minimum scrubber liquid pH and flow rate established in accordance with Special Conditions No. 24 and 25 shall be the average pH and minimum liquid flow

rate at which compliance with the above was demonstrated based on the results of the average of at least three test runs. **(5/15)**

E. Testing Conditions.

(1) EPN: CT shall be tested at or above 90% of the maximum turbine load for the given atmospheric conditions at the time of testing. Each tested turbine load shall be identified in the sampling report.

(2) EPNs: 65B-81A through 65B-81E shall each be tested at both 25-50% and 80% or above of the manufacturer's stated maximum heat input capacity.

(3) EPNs: TO1, TO2, and TO3 shall each be tested at least 90% of the associated amine treatment system design gas throughput.

F. Sampling as required by this condition shall occur within 60 days after achieving the nominal power output at which the turbine will be operated, but no later than 180 days after initial start-up of the combustion turbine. Additional sampling may be required by TCEQ or EPA.

G. Within 60 days after the completion of the testing and sampling required herein, three copies of the sampling reports shall be distributed as follows:

(1) One copy to the TCEQ Houston Regional Office.

(2) One copy to the EPA Region 6 Office, Dallas.

Continuous Demonstration of Compliance

18. The holder of this permit shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) to measure and record the concentrations of NO_x, CO, and diluents (O_2 or carbon dioxide) in the turbine exhaust (EPN: CT).

A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable Performance Specifications in 40 CFR Part 60, Appendix B. The CEMS shall follow the monitoring requirements of 40 CFR § 60.13.

B. The NO_x/diluent CEMS must be operated according to the methods and procedures as set out in 40 CFR § 60.4345.

C. The CO CEMS shall meet the appropriate quality assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1. An equivalent quality-assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur at least two months apart.

D. The TCEQ Houston Regional Office shall be notified at least 21 days prior to any required relative accuracy test audit in order to provide them the opportunity to observe the testing.

E. Monitored NO_x and CO concentrations must be corrected and recorded in dimensional units and averaging times corresponding to the emission limitations in

Special Condition No. 8 and the MAERT. Compliance for monitored pollutants is based on this data.

F. The CEMS shall be operational during 95 percent of the operating hours of the facility, exclusive of the time required for zero and span checks. If this operational criterion is not met for the reporting quarter, the holder of this permit shall develop and implement a monitor quality improvement plan. The monitor quality improvement plan shall be developed and submitted to the TCEQ Houston Regional Office for their approval within six months. The plan should address the downtime issues to improve availability and reliability.

A CEMS with downtime due to breakdown, malfunction, or repair of more than 10% of the facility operating time for any calendar year shall be considered as a defective CEMS and the CEMS shall be replaced within 2 weeks.

19. The NH_3 concentration in the stack of EPN: CT shall be tested or calculated according to one of the methods listed below and shall be monitored according to one of the methods listed below. Monitoring NH_3 slip is only required on days when the SCR unit is in operation.

A. The permit holder may install and operate a second NO_x CEMS probe located before the SCR, upstream of the stack NO_x CEMS, which may be used in association with the SCR efficiency and NH_3 injection rate to estimate NH_3 slip. This condition shall not be construed to set a minimum NO_x reduction efficiency on the SCR unit.

B. The permit holder may install and operate a dual stream system of NO_x CEMS at the exit of the SCR. One of the exhaust streams would be routed, in an unconverted state, to one NO_x CEMS and the other exhaust stream would be routed through a NH_3 converter to convert NH_3 to NO_x and then to a second NO_x CEMS. The NH_3 slip concentration shall be calculated from the delta between the two NO_x CEMS readings (converted and unconverted).

C. Any other method used for measuring NH_3 slip shall require prior approval from the TCEQ Office of Air, Air Permits Division.

20. The permit holder shall monitor and record the average hourly fuel consumption of the turbine. The fuel flow meter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, fuel flow meters that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of this chapter are acceptable for use under this subpart.

21. The permit holder shall monitor and record the average hourly fuel consumption of each heating medium heater. The fuel flow meter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions.

22. The flue gas recirculation rate for each heating medium heater (EPNs: 65B-81A through 65B-81E) shall be monitored when the heater is in operation to ensure compliance with the NO_x and CO limits of this permit:

A. A minimum and maximum exhaust oxygen concentration, based on a one hour average, shall be established using the most recent performance test data. A process oxygen monitor shall be used to ensure the oxygen content of the flue gas is within the allowable range. The monitor shall be maintained according to the manufacturer's instructions.

B. A minimum flue gas recirculation fan current, based on a one hour average, shall be established using the most recent performance test data. The current must be monitored continuously and recorded at least four times an hour (once per quarter of the hour) and averaged on an hourly basis. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 1% of reading; or ± 5% over its operating range.

Thermal Oxidizers

23. Vents from each amine treatment unit must be directed to the regenerative thermal oxidizers (RTO). The RTO combustion chamber outlet temperatures and exhaust oxygen concentration for EPNs: TO1, TO2, and TO3 shall be continuously monitored when waste gas is directed to the RTO. The outlet temperature and oxygen concentration must be recorded at least four times an hour (once per quarter of the hour) when waste gas is directed to the TO and averaged hourly for compliance demonstration. A partial operational hour with greater than 30 minutes of data shall count as a valid hour.

A. The minimum outlet temperature shall be 1400 degrees Fahrenheit until a minimum operating temperature is established by the testing required in Special Condition No. 17. The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall be accurate to within the greater of ±1 percent of the temperature being measured or ±4.5 degrees Fahrenheit.

B. The minimum exhaust oxygen concentration shall not be less than 3 percent oxygen. The oxygen monitor shall be zeroed and spanned daily and corrective action taken when the 24-hour span drift exceeds two times the amounts specified Performance Specification No. 3, 40 CFR Part 60, Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days. The oxygen monitor shall be audited in accordance with §5.1 of 40 CFR Part 60, Appendix F with the following exception to Procedure 1, § 5.1.2: the monitor may be quality-assured semiannually using cylinder gas audits (CGAs) and a relative accuracy test audit is not required once every four quarters (i.e., two successive semiannual CGAs may be conducted). An equivalent quality assurance method approved by the TCEQ may also be used. Successive semiannual audits shall occur no closer than four months. Necessary corrective action shall be taken for all CGA exceedances of ±15 percent accuracy and any continuous emissions monitoring system downtime in excess of 5 percent of the time when waste gas is directed to the RTO. These occurrences and corrective actions shall be reported to the appropriate

TCEQ Regional Director on a quarterly basis. No report is required if no corrective action was necessary. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

Quality assured (or valid) data must be generated when waste gas is directed to the RTO except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the RTO operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

The permit holder may apply for removal of this condition if, upon final design of the RTO, the vendor has ensured exhaust oxygen content will consistently be above 3 percent.

C. After a planned shutdown of any pretreatment train, the permit holder shall visually inspect packing to identify any settling or other issues that would negatively affect the RTO performance. This condition does not have to be performed more than once per year if planned shutdowns occur more frequently than once per year.

24. When waste gas is directed to the RTO, the RTO wet scrubber shall be operated at the minimum pH or higher on a 1-hour average based on the most recent performance test data. The liquid pH must be recorded at least four times an hour (once per quarter of the hour) when waste gas is directed to the RTO and averaged on an hourly basis. Each monitoring device shall be cleaned with an automatic cleaning system, or cleaned weekly using hydraulic, chemical, or mechanical cleaning. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least weekly, whichever is more frequent, and shall be accurate to within ± 0.5 pH units.

25. When waste gas is directed to the RTO, the RTO scrubber shall be operated at the minimum liquid flow rate or higher on a 1-hour average based on the most recent performance test data. The flow rate must be recorded at least four times an hour (once per quarter of the hour) when waste gas is directed to the RTO and averaged on an hourly basis. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within ± 2% of span or ± 5% of design liquid flow rate.

26. The electrostatic precipitator (ESP) shall be operated at a minimum secondary voltage established using the most recent performance test data. The secondary voltage of the ESP shall be continuously monitored and, once per day, the secondary voltage recorded. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 2% of reading; or ± 5% over its operating range.

27. The electrostatic precipitator (ESP) shall be operated between a minimum and maximum spark rate established using the most recent performance test data. The spark rate of the ESP shall be continuously monitored and, once per day, the spark rate recorded. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within ± 5% of reading.

28. In order to determine SO_2 emissions from the process, the permit holder shall analyze gas sulfur content, at least quarterly, by sampling the gas prior to the first treatment device and the CO_2-rich amine waste gas using ASTM methods D1072, D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 and perform the following:

    A. Monitor total feed gas flow into the plant on an hourly basis. The flow monitor must receive an in situ third-party certification on an annual basis to demonstrate it will meet ± 5.0% accuracy;

    B. Monitor total CO_2-rich amine waste gas flow from the amine treatment system on an hourly basis. The flow monitor must receive an in situ third-party certification on an annual basis to demonstrate it will meet ± 5.0% accuracy; and

    C. Calculate SO_2 emissions as a mass balance based on the mass of incoming sulfur using the most recent incoming plant feed gas sulfur content data and the data from paragraphs A, B, the conversion of sulfur to SO_2 in the Thermal Oxidizer, and the SO_2 wet scrubber removal efficiency.

    D. Any additional analyses besides the above, such as measuring the sulfur content of the LNG prior to being loaded onto a ship, may be used to refine the assumption that all sulfur not removed from the incoming plant feed gas is either scrubbed out of the gas or emitted as SO_2.

Maintenance, Startup, and Shutdown

29. The permit holder shall establish, implement, and update, as appropriate, a program to maintain and repair facilities. The minimum requirements of this program must include:

    A. A maintenance program developed by the permit holder for all equipment that is consistent with good air pollution control practices, or alternatively, manufacturer's specifications and recommended programs applicable to equipment performance and the effect on emissions;

    B. Cleaning and routine inspection of all equipment;

    C. Repair of equipment on timeframes that minimize equipment failures and maintain performance;

    D. Training of personnel who implement the maintenance program; and

    E. Records of conducted planned MSS activities.

30. Sections of the plant handling natural gas or natural gas liquids undergoing shutdown or maintenance that requires breaking a line or opening a vessel shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.

    A. The process equipment shall be degassed using good engineering and best management practices as developed per Special Condition No. 29 to ensure air contaminants are removed from the system through the control device (EPN: PTFFLARE) to the extent allowed by process equipment or storage vessel design. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.

    B. The locations and/or identifiers where the purge gas enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement).

    C. If the process equipment requires purging, it will be conducted using best management and good air pollution control practices.

31. All contents from process equipment or storage tanks must be removed to the maximum extent possible practicable prior to opening equipment to commence degassing and maintenance. Liquid and solid removal must be directed to covered containment, recycled, or disposed of properly. If it is necessary to drain liquid into an open pan or the sump, the liquid must be covered and transferred to a covered vessel within one hour of being drained.

Nonattainment Review

32. This Nonattainment New Source Review major source authorization to install and operate the Pretreatment Plant will require 67.4 tons per year (tpy) of emissions reduction credits (ERCs) of NO_x upon start of operation of the project. These ERCs provide offsets at the rate of 1.3:1.0 for the 51.8 tpy of NO_x increases authorized under this permit.

    The permittee may satisfy the 1:1 portion of the offset through use of emission reduction credits (ERCs) and/or participation in the Mass Emission Cap and Trade (MECT) Program and the 0.3 portion shall either be ERCs, discrete emission reduction credits (DERCs), or obtained from MECT. If the permittee chooses to use MECT allowances for the 0.3 portion of the offset, the MECT allowances shall be permanently retired prior to start of operation of the source.

    If participation in the MECT program is used for any part of the 1:1 portion of the offset, at the beginning of the MECT compliance period in which a source will commence operation

and at the beginning of each MECT compliance period after that, the permittee must have sufficient MECT allowances to cover the potential to emit of that source or the portion of the potential to emit being offset through participation in the MECT program.

All offsets used to satisfy this condition will be located within the Harris-Galveston-Brazoria Area and will be federally enforceable and accounted for through the TCEQ Emissions Banking and Trading Team.

Recordkeeping Requirements

33. The following records must be kept at the plant for the life of the permit. All records required in this permit must be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction:

    A. A copy of this permit.

    B. Permit application dated July 18, 2012, and subsequent representations submitted to the TCEQ.

    C. A copy of the written procedures used in connection with Special Conditions Nos. 29 and 30.

34. The following information must be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and must be made available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:

    A. Records of the sulfur content of the diesel fuel fired in the emergency engines. Fuel delivery receipts are an acceptable record.

    B. Records of emergency engine hours of operation to show compliance with Special Condition No. 6 including date, time, and duration of operation.

    C. Records of pilot flame loss required by Special Condition No. 7C.

    D. Records of hourly flow rates to the flare as required by Special Condition No. 7E and totals on a monthly and rolling 12-month basis..

    E. The CEMS data of NO_x, CO, and O_2 emissions from EPN: CT to demonstrate compliance with the emission rates listed in the MAERT and Special Condition No. 8.

    F. Raw data files of all CEMS data including calibration checks, adjustments, and maintenance performed on these systems in a permanent form suitable for inspection.

    G. Records of fuel usage on an hourly and rolling 12-month basis for the combustion turbine (EPN: CT) and the heating medium heaters (EPNs 65B-81A through 65B-81E) pursuant to Special Condition Nos. 20 and 21.

H. Records of visible emissions and opacity observations and any corrective actions taken pursuant to Special Condition No. 11.

I. Records of ammonia concentration, AVO checks, and maintenance performed to any piping and valves in NH_3 service pursuant to Special Condition Nos. 12 and 13.

J. Records of accidental releases, spills, or venting of NH_3 and the corrective action taken.

K. Records of NH_3 monitoring pursuant to Special Condition No. 19.

L. Records of RTO exhaust temperature and oxygen concentration as required by Special Condition No. 23 on an hourly basis.

M. Records of scrubber liquid pH and flow rate as required by Special Condition Nos. 24 and 25 on an hourly basis.

N. Records of the ESP secondary voltage and spark rate as required by Special Condition Nos. 26 and 27.

O. For records of MSS:

(1) Date, time, and duration of the event; and

(2) Emissions from the event.

Date: May 21, 2015

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 104840 and N170

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
65B-81A	Heating Medium Heater A	NO_x	0.83	-
		CO	2.52	-
		PM	0.91	-
		PM_{10}	0.91	-
		$PM_{2.5}$	0.91	-
		SO_2	0.08	-
		H_2SO_4	<0.01	-
		VOC	0.26	-
65B-81B	Heating Medium Heater B	NO_x	0.83	-
		CO	2.52	-
		PM	0.91	-
		PM_{10}	0.91	-
		$PM_{2.5}$	0.91	-
		SO_2	0.08	-
		H_2SO_4	<0.01	-
		VOC	0.26	-
65B-81C	Heating Medium Heater C	NO_x	0.83	-
		CO	2.52	-
		PM	0.91	-
		PM_{10}	0.91	-

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
		$PM_{2.5}$	0.91	-
		SO_2	0.08	-
		H_2SO_4	<0.01	-
		VOC	0.26	-
65B-81D	Heating Medium Heater D	NO_x	0.83	-
		CO	2.52	-
		PM	0.91	-
		PM_{10}	0.91	-
		$PM_{2.5}$	0.91	-
		SO_2	0.08	-
		H_2SO_4	<0.01	-
		VOC	0.26	-
65B-81E	Heating Medium Heater E	NO_x	0.83	-
		CO	2.52	-
		PM	0.91	-
		PM_{10}	0.91	-
		$PM_{2.5}$	0.91	-
		SO_2	0.08	-
		H_2SO_4	<0.01	-
		VOC	0.26	-
65B-81A through E	Heating Medium Heaters A through E Annual Emissions Cap	NO_x	-	4.36
		CO	-	13.27
		PM	-	4.79

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
		PM_{10}	-	4.79
		$PM_{2.5}$	-	4.79
		SO_2	-	0.41
		H_2SO_4	-	0.03
		VOC	-	1.37
TO1	Amine Unit/ Thermal Oxidizer 61	NO_x	0.30	1.31
		CO	0.09	0.40
		PM	1.29	5.65
		PM_{10}	1.29	5.65
		$PM_{2.5}$	1.29	5.65
		SO_2	0.85	3.04
		H_2SO_4	0.06	0.23
		VOC	0.02	0.09
		H_2S	0.17	0.62
TO2	Amine Unit/ Thermal Oxidizer 62	NO_x	0.30	1.31
		CO	0.09	0.40
		PM	1.29	5.65
		PM_{10}	1.29	5.65
		$PM_{2.5}$	1.29	5.65
		SO_2	0.85	3.04
		H_2SO_4	0.06	0.23
		VOC	0.02	0.09
		H_2S	0.17	0.62

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
TO3	Amine Unit/ Thermal Oxidizer 63	NO_x	0.30	1.31
		CO	0.09	0.40
		PM	1.29	5.65
		PM_{10}	1.29	5.65
		$PM_{2.5}$	1.29	5.65
		SO_2	0.85	3.04
		H_2SO_4	0.06	0.23
		VOC	0.02	0.09
		H_2S	0.17	0.62
CT	Combustion Turbine Stack	NO_x	9.87	40.29
		NO_x (SS)	87.00	-
		CO	12.02	48.95
		CO (SS)	57.00	-
		PM_{10}	15.22	65.06
		$PM_{2.5}$	15.22	65.06
		SO_2	3.68	15.12
		H_2SO_4	0.28	1.16
		VOC	3.43	13.95
		NH_3	18.24	74.11
LUBVENT	Lube Oil Vent	PM_{10}	0.05	0.22
		$PM_{2.5}$	0.05	0.22
		VOC	0.05	0.22
PTFFLARE	PTF Flare	NO_x	21.65	2.06

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
		CO	43.22	4.11
		VOC	127.21	1.15
PTFFWP	Fire Water Pump	NO_x	4.12	0.21
		CO	3.80	0.19
		PM	0.22	0.01
		PM_{10}	0.22	0.01
		$PM_{2.5}$	0.22	0.01
		SO_2	0.01	<0.01
		H_2SO_4	<0.01	<0.01
		VOC	0.22	0.01
PTFEG-1	Emergency Generator Train 61	NO_x	7.55	0.19
		CO	4.34	0.11
		PM	0.25	0.01
		PM_{10}	0.25	0.01
		$PM_{2.5}$	0.25	0.01
		SO_2	0.01	<0.01
		H_2SO_4	<0.01	<0.01
		VOC	0.40	0.0099
PTFEG-2	Emergency Generator Train 62	NO_x	7.55	0.19
		CO	4.34	0.11
		PM	0.25	0.01
		PM_{10}	0.25	0.01
		$PM_{2.5}$	0.25	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
		SO_2	0.01	<0.01
		H_2SO_4	<0.01	<0.01
		VOC	0.40	0.0099
PTFEG-3	Emergency Generator Train 63	NO_x	7.55	0.19
		CO	4.34	0.11
		PM	0.25	0.01
		PM_{10}	0.25	0.01
		$PM_{2.5}$	0.25	0.01
		SO_2	0.01	<0.01
		H_2SO_4	<0.01	<0.01
		VOC	0.40	0.0099
PTFEG-4	Emergency Generator Utility Area	NO_x	7.55	0.19
		CO	4.34	0.11
		PM	0.25	0.01
		PM_{10}	0.25	0.01
		$PM_{2.5}$	0.25	0.01
		SO_2	0.01	<0.01
		H_2SO_4	<0.01	<0.01
		VOC	0.40	0.0099
PTFEG-5	Emergency Generator Utility Area	NO_x	7.55	0.19
		CO	4.34	0.11
		PM	0.25	0.01
		PM_{10}	0.25	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
		$PM_{2.5}$	0.25	0.01
		SO_2	0.01	<0.01
		H_2SO_4	<0.01	<0.01
		VOC	0.40	0.0099
PTFEAC	Emergency Air Compressor	NO_x	1.87	0.05
		CO	1.73	0.04
		PM	0.10	<0.01
		PM_{10}	0.10	<0.01
		$PM_{2.5}$	0.10	<0.01
		SO_2	0.01	<0.01
		H_2SO_4	<0.01	<0.01
		VOC	0.10	0.0025
FUG-TREAT	Pretreatment VOC Fugitives (6)	VOC	0.22	0.98
FUG-CT	Pretreatment Ammonia Fugitives (6)	NH_3	0.12	0.51
PTFEGT-1	Diesel Emergency Generator Tank 1	VOC	<0.01	0.00058
PTFEGT-2	Diesel Emergency Generator Tank 2	VOC	<0.01	0.00058
PTFEGT-3	Diesel Emergency Generator Tank 3	VOC	<0.01	0.00058
PTFEGT-4	Diesel Emergency Generator Tank 4	VOC	<0.01	0.00058
PTFEGT-5	Diesel Emergency Generator Tank 5	VOC	<0.01	0.00058
PTFEACT-1	Diesel Emergency Air Compressor Tank 1	VOC	<0.01	0.00058

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
PTFFWPT-1	Diesel Firewater Tank	VOC	0.02	0.00042

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
H_2SO_4 - sulfuric acid mist
H_2S - hydrogen sulfide
(4) Planned startup and shutdown (SS) lbs/hour emissions for all pollutants are authorized even if not specifically identified as SS.
(5) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period. Annual emission rates for each source include planned SS emissions.
(6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: March 24, 2015